

INTERNATIONAL SEARCH REPORT

International application No

PCT/US04/354₅₂

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) B21D 39/00, B23K 31/02; B23K 35/12; B32B 31/00		
US CL : 228/164, 135,141 1,173.2,182,193,203,252;29/17.1, 17.3,17.4,904		
According to International Patent Classification (IPC1 or to both national classification and IPC)		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 228/164,135,141. 1,173.2,182, 193,203,252;29/17.1, 17.3,17.4,904		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	US 6,672,502 B1 (PAUL et al.) 06 January 2004 (06.01.2004), entire document	1-65
<input type="checkbox"/> Further documents are listed in the continuation of Box C		
D See patent family annex.		
* Special categories of cited documents		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
E " earlier application or patent published on or after the international filing date	"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"T" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
08 February 2006 (08.02.2006)	06 MAR 2006	
Name and mailing address of the ISA/US	Authorized officer	
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Form PCT/ISA/210 (second sheet) (April 2005)

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